

REMARKS/ARGUMENTS

Applicants thank Examiner Willse for the telephone interview conducted on November 6, 2003. Applicants have amended the claims and provided the following remarks in accordance with the interview discussion.

INFORMATION DISCLOSURE STATEMENTS

In the November 6, 2003 telephone interview, Examiner Willse indicated that some of the information disclosure statements filed on February 19, 2003 may not have been properly matched with the application file. With this Amendment, Applicants have provided copies of the electronic information disclosure statements, along with copies of the corresponding Acknowledgement Receipts. Applicants have also provided a copy of the paper information disclosure statement, along with a copy of the postcard date-stamped by the OIPE on February 26, 2003. Applicants respectfully request citation of the references. If the Examiner is unable to locate the references corresponding to the paper information disclosure statement, the Examiner is invited to contact Applicants' attorney at (414) 347-4769.

STATUS OF THE CLAIMS

Applicants have amended Claim 1 to correct a typographical error. Applicants have cancelled Claims 5, 10-11, 13, and 29-40. Claims 7-9, 12, 25, 28, 45-47, 50 and 63-111 have been withdrawn from consideration in light of the species election. Claims 1-4, 6, 14-24, 26-27, 41-44, 48-49 and 51-62 are currently being considered. Claims 1-3, 6, 14-21, 26, 41, 43-44, 48 and 51-59 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,077,301 issued to Pusch. Claims 4, 22-24, 27, 42, 49 and 60-62 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pusch.

CLAIM REJECTIONS – 35 U.S.C. § 102

Independent Claim 1

Claim '1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Applicants respectfully submit that Claim 1 is supported by the original disclosure of the great-grandparent application (Application Serial No. 08/602,241; now U.S. Patent No. 5,800,568; hereinafter "the '568 Patent") and entitled to a priority date of February 16, 1996. As a result, Pusch, which was filed on April 22, 1998, is not prior art to Claim 1. Applicants have provided below citations to the specification of the '568 Patent that provide support for each claim limitation. Independent Claim 1 is supported by the specification of the '568 Patent as follows:

"a pylon having an upper end for attachment to the amputee and a lower end" – *See '568 Patent*, Figures 5A-5B and 6A-6C; col. 3, lines 47-50 (pylon 52).

"a prosthetic foot" – *See '568 Patent*, Figures 5A-5B and 6A-6C; col. 3, lines 47-50 (prosthetic foot 54).

"a prosthetic ankle coupled between the pylon and the prosthetic foot" – *See '568 Patent*, Figures 5A-5B and 6A-6C; col. 1, lines 38-42; col. 3, lines 47-50 (prosthetic ankle 10).

"an upper leg coupled to the lower end of the pylon" – *See '568 Patent*, Figures 5A-5B and 6A-6C; col. 1, lines 38-42; col. 2, lines 8-11 (upper leg 14).

"a lower leg coupled to the prosthetic foot" – *See '568 Patent*, Figures 5A-5B and 6A-6C; col. 1, lines 38-42; col. 2, lines 23-26 (lower leg 24).

"an interconnecting portion located between the upper leg and the lower leg" – *See '568 Patent*, , Figures 5A-5B and 6A-6C; col. 1, lines 41-47; col. 2, lines 34-37 (interconnecting member or curved leg 32).

"at least one link coupled to at least one of the lower end of the pylon and the upper leg" – *See '568 Patent*, Figures 5A-5B and 6A-6C; col. 3, lines 25-29;

Figure 5A (a limit strap 36 is coupled to a lower end of the pylon 52 and the upper leg 14).

“the at least one link also coupled to at least one of the lower leg and the prosthetic foot” – *See ‘568 Patent*, col. 3, lines 25-29; Figure 5A (illustrating a limit strap 36 coupled to a lower leg 14 of the prosthetic ankle 10 and a prosthetic foot 54).

“the at least one link at least partially defining a maximum displacement between the upper leg and the lower leg” – *See ‘568 Patent*, col. 3, lines 29-45.

Applicants also respectfully submit that one of ordinary skill in the art would understand that the limit strap 36 acts as “at least one link” between the upper leg 14 and the lower leg 24 of the prosthetic ankle 10.

In light of the above, Applicants respectfully submit that independent Claim 1 is supported by the original specification of the ‘568 Patent as filed on February 16, 1996. Accordingly, Pusch is not prior art to Claim 1. Thus, independent Claim 1 and dependent Claims 2-3, 6, and 14-21 are allowable.

Dependent Claim 2

Claim 2 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claim 2 is supported by the specification of the ‘568 Patent as follows:

“the upper leg has an anterior portion” – *See ‘568 Patent*, Figure 5A.

“the lower leg has an anterior portion” – *See ‘568 Patent*, Figure 5A.

“the interconnecting portion is located between the anterior portion of the upper leg and the anterior portion of the lower leg” – *See ‘568 Patent*, Figure 5A; col. 1, lines 41-43; col. 2, lines 35-37.

Applicants respectfully submit that Claim 2 is supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claim 2, and Claim 2 is allowable.

Dependent Claim 3

Claim 3 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claim 3 is supported by the specification of the '568 Patent as follows:

“the upper leg has a posterior portion” – *See '568 Patent*, Figure 5A.

“the lower leg has a posterior portion” – *See '568 Patent*, Figure 5A.

“the at least one link is coupled between the posterior portion of the upper leg and the posterior portion of the lower leg” – *See '568 Patent*, Figure 5A; col. 3, lines 25-26.

Applicants respectfully submit that Claim 3 is supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claim 3, and Claim 3 is allowable.

Dependent Claim 6

Claim 6 depends from Claim 1 and is therefore allowable for the reasons set forth above with respect to Claim 1. In addition, Claim 6 specifies “wherein the pylon and the prosthetic ankle are an integral unit.”

Pusch discloses a jointless artificial foot including a base spring 10, a C-spring 20, and an adapter 30. *Pusch*, Figure 1; col. 3, lines 58-62; col. 4, lines 34-36. Although not specifically discussed in Pusch, the adapter 30 can be connected to a separate conventional pylon. However, Pusch does not disclose, teach, or suggest the pylon and the prosthetic ankle being an integral unit. Accordingly, Claim 6 specifies additional patentable subject matter.

Dependent Claims 14-15

Claims 14-15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claims 14-15 are supported by the specification of the '568 Patent as follows:

“at least a portion of the prosthetic ankle is flexible” – *See '568 Patent*, Figure 5B, 6B, and 6C; col. 4, lines 11-15.

“the interconnecting portion is flexible” – *See '568 Patent*, Figure 5B, 6B, and 6C; col. 4, lines 11-15.

Applicants respectfully submit that Claims 14-15 are supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claims 14-15, and Claims 14-15 are allowable.

Dependent Claim 16

Claim 16 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claim 16 is supported by the specification of the '568 Patent as follows:

“wherein at least a portion of the prosthetic ankle flexes before the pylon flexes when a load is placed on the prosthetic walking system” – *See '568 Patent*, Figure 5B and 6A-6C (illustrating to one of ordinary skill in the art that when the prosthetic ankle flexes, the pylon remains substantially straight).

Applicants respectfully submit that Claim 16 is supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claim 16, and Claim 16 is allowable.

Dependent Claim 17

Claim 17 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claim 17 is supported by the specification of the '568 Patent as follows:

“the prosthetic ankle has a cross-sectional shape having a first moment of inertia and the pylon has a cross-sectional shape having a second moment of inertia” – *See ‘568 Patent*, Figure 3 (illustrating that in some embodiments, the curved leg 32 has a rectangular cross-sectional shape, which one of ordinary skill in the art would understand to have a first moment of inertia); Figures 5A-5B and 6A-6C (illustrating that in some embodiments, the pylon 52 has a circular cross-sectional shape, which one of ordinary skill in the art would understand to have a second moment of inertia).

“the first moment of inertia is less than the second moment of inertia so that the prosthetic ankle flexes before the pylon flexes when a load is placed on the prosthetic walking system” – *See ‘568 Patent*, Figure 5B and 6A-6C (illustrating to one of ordinary skill in the art that the first moment of inertia is less than the second moment of inertia so that when the prosthetic ankle flexes, the pylon remains substantially straight).

Applicants respectfully submit that Claim 17 is supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claim 17, and Claim 17 is allowable.

Dependent Claim 18

Claim 18 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claim 18 is supported by the specification of the ‘568 Patent as follows:

“wherein the pylon has a first width and a portion of the prosthetic ankle has a second width smaller than the first width so that the prosthetic ankle flexes before the pylon flexes when a load is placed on the prosthetic walking system” – *See ‘568 Patent*, col. 2, line 64 to col. 3, line 13 (the shape and depth of the curved leg can be adjusted to optimize the ability of the prosthetic ankle to allow medial/lateral canting and axial torsion); Figure 5B and 6A-6C (illustrating to one

of ordinary skill in the art that when the prosthetic ankle flexes, the pylon remains substantially straight).

Applicants respectfully submit that Claim 18 is supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claim 18, and Claim 18 is allowable.

Dependent Claim 19

Claim 19 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claim 19 is supported by the specification of the '568 Patent as follows:

“wherein the portion of the prosthetic ankle having the second width is positioned asymmetrically with respect to a longitudinal axis of the pylon” – *See '568 Patent*, col. 3, lines 8-11 (in some embodiments, the depth of the curved leg on the medial side can be made deeper than on the lateral side so canting in the medial direction is easier than canting in the lateral direction).

Applicants respectfully submit that Claim 19 is supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claim 19, and Claim 19 is allowable.

Dependent Claim 20

Claim 20 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claim 20 is supported by the specification of the '568 Patent as follows:

“wherein the pylon has a substantially circular cross-sectional shape and the prosthetic ankle has a substantially rectangular cross-sectional shape” – *See '568 Patent*, Figures 5A-5B and 6A-6C (illustrating that in some embodiments, the pylon 52 has a circular cross-sectional shape); Figure 3 (illustrating that in some embodiments, the curved leg 32 has a rectangular cross-sectional shape).

Applicants respectfully submit that Claim 20 is supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claim 20, and Claim 20 is allowable.

Dependent Claim 21

Claim 21 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claim 21 is supported by the specification of the '568 Patent as follows:

“the pylon is constructed of a first material” – *See '568 Patent*, col. 2, lines 15-17 (the prosthetic ankle 10 can be connected to a conventional pylon).

“the prosthetic ankle is constructed of a different second material” - *See '568 Patent*, col. 2, lines 18-23 (in some embodiments, the prosthetic ankle can be constructed of carbon-fiber composite, steel, plastic, DELRIN®, nylon, or aluminum, and one or more of these materials would be different than the material used for the pylon).

“the second material is more compliant than the first material so that the prosthetic ankle flexes before the pylon flexes when a load is placed on the prosthetic walking system” – *See '568 Patent*, Figure 5B and 6A-6C (illustrating to one of ordinary skill in the art that when the prosthetic ankle flexes, the pylon remains substantially straight).

Applicants respectfully submit that Claim 21 is supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claim 21, and Claim 21 is allowable.

Independent Claim 26

Independent Claim 26 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claim 26 is supported in the specification of the '568 Patent as follows:

“attaching a prosthetic walking system to the amputee, the prosthetic walking system including a pylon, a prosthetic foot, and a prosthetic ankle coupled between the pylon and the prosthetic foot, the prosthetic ankle having an upper leg, a lower leg, and an interconnecting portion located between the upper leg and the lower leg” – See *'568 Patent*, Figures 5A-5B and 6A-6C; col. 1, lines 38-42; col. 1, lines 41-47; col. 2, lines 8-11; col. 2, lines 23-26; col. 2, lines 34-37; and col. 3, lines 47-50.

“providing at least one link coupled between at least one of the pylon and the upper leg and at least one of the lower leg and the prosthetic foot” – See *'568 Patent*, col. 3, lines 25-29; Figure 5A (a limit strap 36 is coupled to an upper leg 14 of the prosthetic ankle 10 and the pylon 52 and to a lower leg 14 of the prosthetic ankle 10 and a prosthetic foot 54).

“limiting the maximum displacement between the upper leg and the lower leg with the at least one link” – See *'568 Patent*, col. 3, lines 29-46.

“adjusting the at least one link to change the maximum displacement between the upper leg and the lower leg” – See *'568 Patent*, col. 3, lines 38-46.

Applicants respectfully submit that one of ordinary skill in the art would understand that the limit strap 36 acts as “at least one link” between the upper leg 14 and the lower leg 24 of the prosthetic ankle 10.

In light of the above, Applicants respectfully submit that independent Claim 26 is supported by the original specification of the *'568 Patent* as filed on February 16, 1996. Accordingly, Pusch is not prior art to Claim 26. Thus, independent Claim 26 and dependent Claim 27 are allowable.

Independent Claim 41

Independent Claim 41 specifies, among other things, “a prosthetic ankle integral with the pylon, the prosthetic ankle including an upper leg having an anterior portion and a posterior portion, the posterior portion being integral with the lower end of the pylon.”

Pusch discloses a jointless artificial foot including a base spring 10, a C-spring 20, and an adapter 30. *Pusch*, Figure 1; col. 3, lines 58-62; col. 4, lines 34-36. Although not specifically discussed in Pusch, the adapter 30 can be connected to a separate conventional pylon. However, Pusch does not disclose, teach, or suggest a posterior portion of an upper leg of a prosthetic ankle being integral with a lower end of a pylon. Accordingly, independent Claim 41 and dependent Claims 42-44, 48-49, and 51-62 are allowable.

Dependent Claims 43-44, 48, and 51-59

Claims 43-44, 48, and 51-59 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Pusch. Claims 43-44, 48, and 51-59 depend from Claim 41 and are therefore allowable for the reasons set forth above with respect to Claim 41. Claims 43-44, 48, and 51-59 may also specify additional patentable subject matter not specifically discussed herein.

CLAIM REJECTIONS – 35 U.S.C. § 103

Dependent Claim 4

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Pusch. Dependent Claim 4 is supported by the specification of the ‘568 Patent as follows:

“wherein the upper leg and the lower leg of the prosthetic ankle are substantially straight and the interconnecting portion of the prosthetic ankle is substantially arcuate” – *See ‘568 Patent*, Figures 5A (illustrating that in some embodiments, the upper leg 14 and the lower leg 24 are substantially straight and the interconnecting member or curved leg 32 is substantially arcuate).

Applicants respectfully submit that Claim 4 is supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claim 4, and Claim 4 is allowable.

Dependent Claim 22

Claim 22 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Pusch. Claim 22 depends from Claim 21 and is therefore allowable for the reasons discussed above with respect to Claim 21. In addition, Claim 22 specifies “wherein the first material is carbon-fiber composite and the second material is fiberglass.”

Pusch discloses a jointless artificial foot including a C-spring 20 that may be made from carbon composite. *Pusch*, col. 4, lines 52-53. However, Pusch does not teach or suggest a pylon constructed of carbon-fiber composite or a prosthetic ankle constructed of fiberglass. Accordingly, dependent Claim 22 specifies additional patentable subject matter.

Dependent Claim 23

Claim 23 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Pusch. Claim 23 depends from Claim 1 and is therefore allowable for the reasons discussed above with respect to Claim 1. In addition, Claim 23 specifies “wherein at least one of the pylon, the prosthetic ankle, and the prosthetic foot includes a lateral section independently movable with respect to a medial section.”

Pusch discloses a jointless artificial foot including a base spring 10 and a C-spring 20. *Pusch*, col. 4, lines 52-53. However, Pusch does not teach or suggest that either the base spring 10 or the C-spring 20 includes a lateral section independently movable with respect to a medial section. Accordingly, dependent Claim 23 specifies additional patentable subject matter.

Dependent Claim 24

Claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Pusch. Claim 24 depends from Claim 23 and is therefore allowable for the reasons discussed above with

respect to Claim 23. In addition, Claim 24 specifies “wherein the prosthetic foot includes a toe portion and the toe portion includes the lateral section and the medial section.”

Pusch discloses a jointless artificial foot including a base spring 10. *Pusch*, col. 4, lines 52-53. However, Pusch does not teach or suggest that the base spring 10 includes a toe portion with a lateral section and a medial section. Accordingly, dependent Claim 24 specifies additional patentable subject matter.

Dependent Claim 27

Claim 27 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Pusch. Dependent Claim 27 is supported by the specification of the ‘568 Patent as follows:

“rotating an adjustment screw to adjust the at least one link” – *See ‘568 Patent*, col. 3, lines 38-46 (in some embodiments, turning the upper insert nut 20 causes a cam lobe 46 to press against the limit strap 36).

Applicants respectfully submit that Claim 27 is supported by the original disclosure of the great-grandparent application. Accordingly, Pusch is not prior art to Claim 27, and Claim 27 is allowable.

Dependent Claims 42, 49 and 60-62

Claims 42, 49 and 60-62 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pusch. Claims 42, 49, and 60-62 depend from Claim 41 and are therefore allowable for the reasons discussed above with respect to Claim 41. Claims 42, 49, and 60-62 may also include additional patentable subject matter not specifically discussed herein.

CONCLUSION

Applicants have provided citations to the specification of the ‘568 Patent for the limitations of many of the independent and dependent claims. It is important to note that the citations provided are not necessarily the only support provided in the ‘568 Patent for the

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claimed subject matter. In addition, the specification of the current application provides additional enabling disclosure for the claimed subject matter.

In view of the foregoing, Applicants respectfully request entry of the amendment and allowance of Claims 1-4, 6, 14-24, 26-27, 41-44, 48-49 and 51-62.

Respectfully submitted,

A handwritten signature in black ink that reads "Raye Lynn Daugherty". The signature is written in a cursive, flowing style.

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